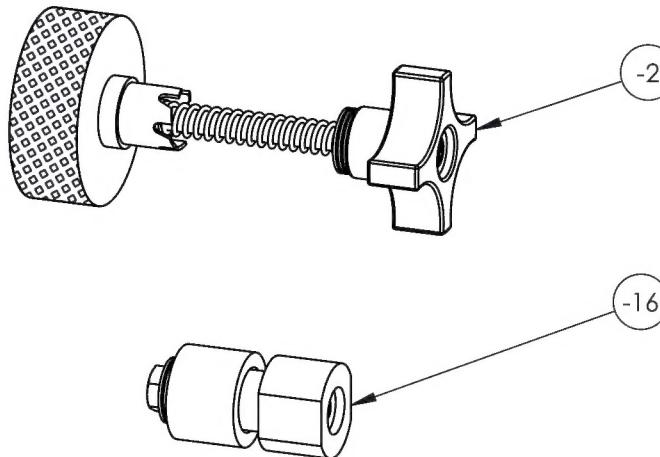


This drawing, specifications, and concepts contained here in are the sole property of Dart Aerospace, and may not be reproduced or used in any fashion without the prior written permission of Dart Aerospace Eugene, OR.

REVISIONS							
REV	ECR	DESCRIPTION			DATE	INITIAL	APPROVED
1		-7 RADIAL ANGLE INCREASED FROM 2° TO 5° TO IMPROVE OPERATION.			2/19/2004	-	-
2		CH'D NOTE P/N -7 TURN TO FROM .660 PER GABRIEL. CH'D REVISIONS TO NUMERICAL, CH'D TITLEBLOCK & REVISION BLOCK, MADE SECTION VIEW A-A P/N -6, LABELED SECTIONS B-B P/N -17, & SECTION C-C P/N -21.			7/27/2009	RJC	-
3	15-0104	UPDATED TO NEW DRAFTING STANDARDS. -1 CH'D DIM WAS Ø.501 IS Ø.5012-.5016. ADDED DIM .10. DELETED TAPER. DELETED DIM 2.000. ADDED DIM 2.50. ADDED MIN. RELIEF. -10 CH'D B/O INFO WAS EUGENE FASTENER #16 IS MCMASTER-CARR #9657K122. -11 ADDED QTY 2 TO -16 ASSY. -13 ADDED QTY 1 TO -16 ASSY. -17 DELETED DIMS .493, .420. ADDED DIM 43.6°. CORRECTED TYPO ON THREAD CALLOUT. -19 ADDED B/O INFO #97633A130. -23 & -25 DELETED. -27 CH'D DIM WAS .030 IS .030 +.005 -.000. ADDED B/O INFO #91247A014. CH'D TOLERANCE ON NON-CRITICAL DIMENSIONS.			5/13/2015	DPD	JAG



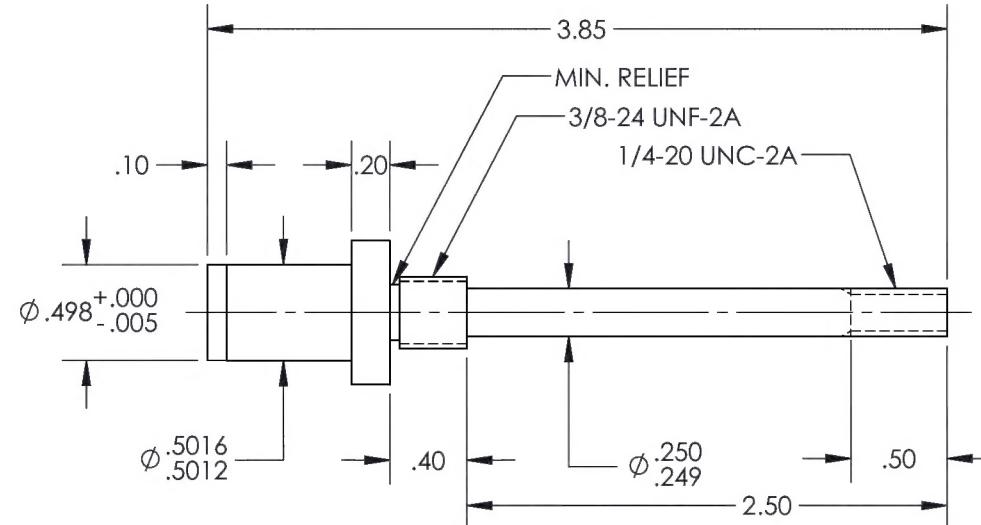
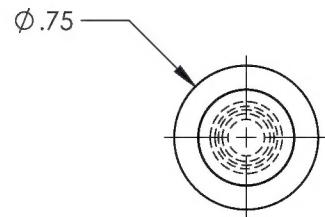
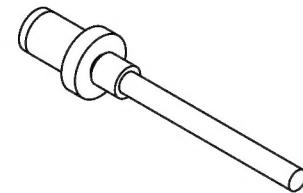
ASSY QTY	ASSY QTY	B/O	Part #	UNIT QTY	Description	Material	B/O INFORMATION OR SPECIFICATIONS	PG.
1			-1		SHAFT	STRESSPROOF		2
X			-2	1	CUTTER ASSEMBLY			3
1			-3		HANDLE	6061 T6		4
1			-7		6 TOOTH CUTTER	0-1		5
1	B/O	-10			SPRING	STEEL	Ø.437 OD X Ø.054 WIRE X 2, 15.54 LBS./IN. (MCMASTER-CARR #9657K122)	3
2	2	B/O	-11		WASHER	STEEL	TRA-411 (APPLIED INDUSTRIAL)	3 & 6
1	1	B/O	-13		BEARING	Alloy Steel	NTA-411 (APPLIED INDUSTRIAL)	3 & 6
1	B/O	-15			KNOB		1/4-20 (ESSENTRA COMPONENTS #DK-54)	3
X			-16	1	REMOVE & INSTALL TOOL			6
1			-17		R & I ADAPTER	STRESSPROOF		7
1	B/O	-19			SNAP RING	STEEL	Ø1/4 (MCMASTER-CARR #97633A130)	6
1			-21		CAP	6061 T6		8
1			-27		BOLT	STEEL	1/4-28 X 1-3/4 (MCMASTER-CARR #91247A014) MODIFIED	9
ASSY -16	ASSY -2							

DART AEROSPACE
TITLE
DAMPER BEARING TOOL KIT

DWG NO.	REV
RB877528-4	3
MAT'L	DRAWN BY: PERRITT
UNLESS OTHERWISE SPECIFIED	APPROVED D Weil
DIMENSIONS ARE IN INCHES	
.XXX ± .005	FRACTIONS ± 1/8
.XX ± .01	ANGLES ± 5°
.X ± .1	
1. BREAK ALL SHARP EDGES .015 x 45°	SPEC
OR .015R	USED ON MODEL
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	MD 500D
SCALE 1:2	DATE 6/28/2000
	SHEET 1 OF 9

This drawing, specifications, and concepts contained here in are the sole property of Dart Aerospace, and may not be reproduced or used in any fashion without the prior written permission of Dart Aerospace Eugene, OR.

REVISIONS							
REV	ECR	DESCRIPTION			DATE	INITIAL	APPROVED
3	15-0104	-1 CH'D DIM WAS Ø.501 IS Ø.5012-.5016. ADDED DIM .10. DELETED TAPER. DELETED DIM 2.000. ADDED DIM 2.50. ADDED MIN. RELIEF.			5/13/2015	DPD	JAG



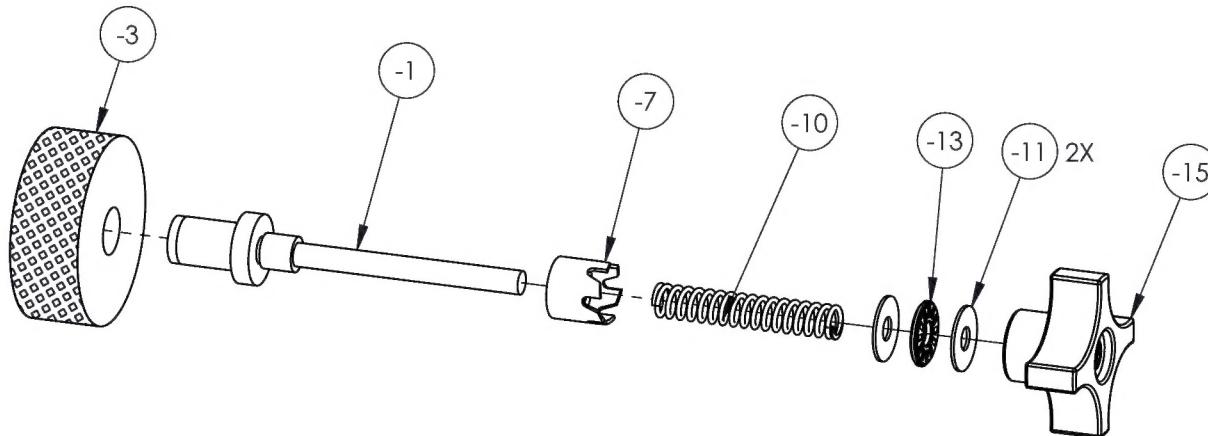
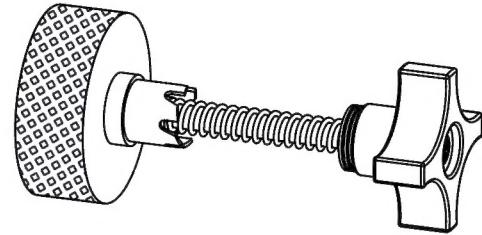
(-1)

SHAFT

DART AEROSPACE	
TITLE DAMPER BEARING TOOL KIT	
DWG NO.	REV 3
DWG NO. RB877528-4-1	
MAT'L STRESSPROOF	DRAWN BY: PERRITT
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	
.XXX ± .005	FRACTIONS ± 1/8
.XX ± .01	ANGLES ± 5°
X ± .1	
HEAT TREAT FINISH BLACK OXIDE	
SPEC	
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
USED ON MODEL MD 500D	
SCALE 1:1	DATE 6/28/2000
SHEET 2 OF 9	

This drawing, specifications, and concepts contained here in are the sole property of Dart Aerospace, and may not be reproduced or used in any fashion without the prior written permission of Dart Aerospace Eugene, OR.

REV	ECR	REVISIONS	DESCRIPTION	DATE	INITIAL	APPROVED
-----	-----	-----------	-------------	------	---------	----------



(-2)

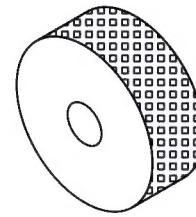
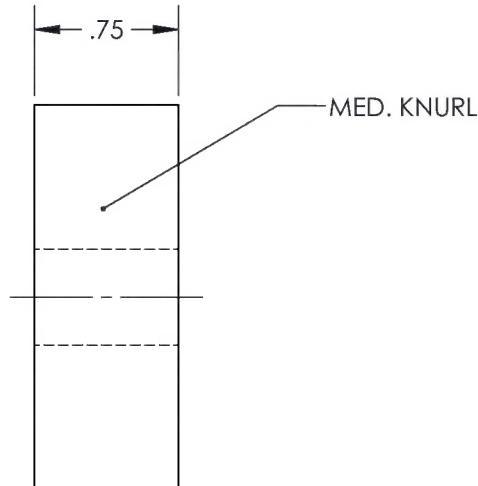
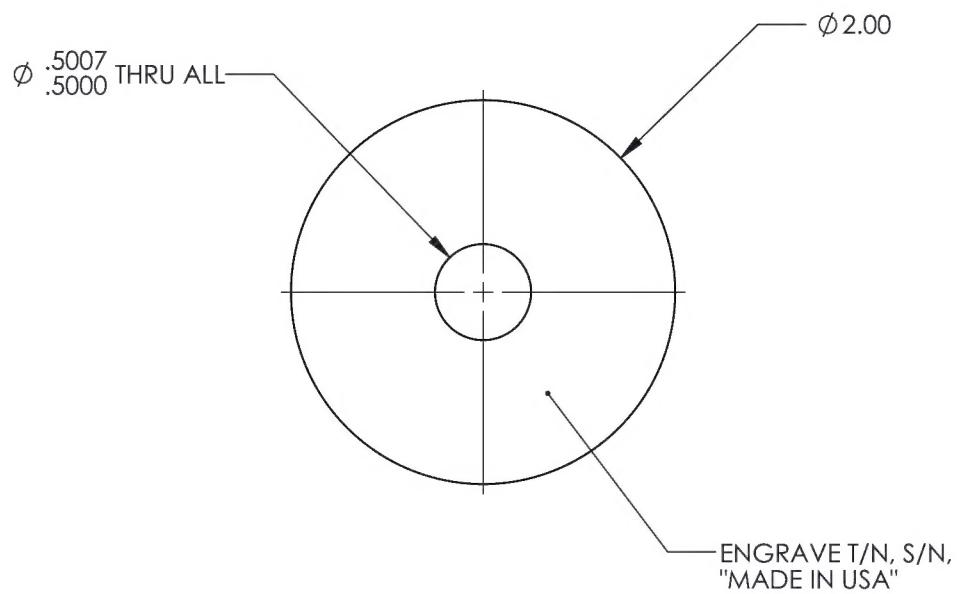
CUTTER ASSEMBLY

DART AEROSPACE	
TITLE	
DAMPER BEARING TOOL KIT	
DWG NO.	RB877528-4-2
MAT'L	DRAWN BY: PERRITT
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	
.XXX ± .005 FRACTIONS ± 1/8	
.XX ± .01 ANGLES ± 5°	
.X ± .1	
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
HEAT TREAT FINISH	
SPEC	
USED ON MODEL	
MD 500D	
SCALE	1:2
DATE	6/28/2000
SHEET 3 OF 9	

REV
3

This drawing, specifications, and concepts contained here in are the sole property of Dart Aerospace, and may not be reproduced or used in any fashion without the prior written permission of Dart Aerospace Eugene, OR.

REV	ECR	REVISIONS	DESCRIPTION	DATE	INITIAL	APPROVED
-----	-----	-----------	-------------	------	---------	----------



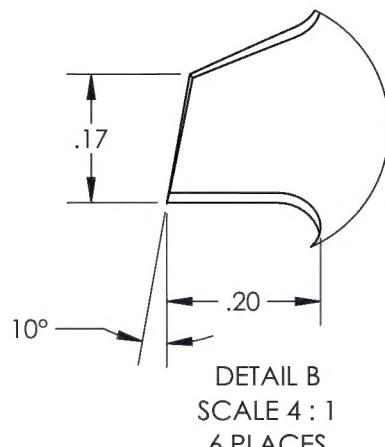
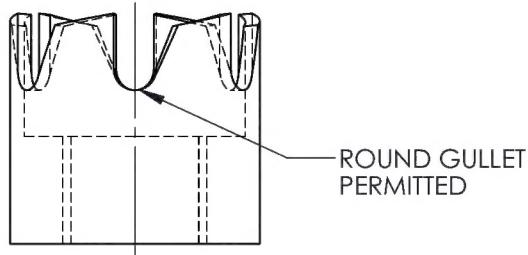
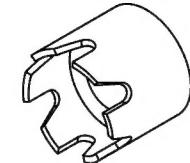
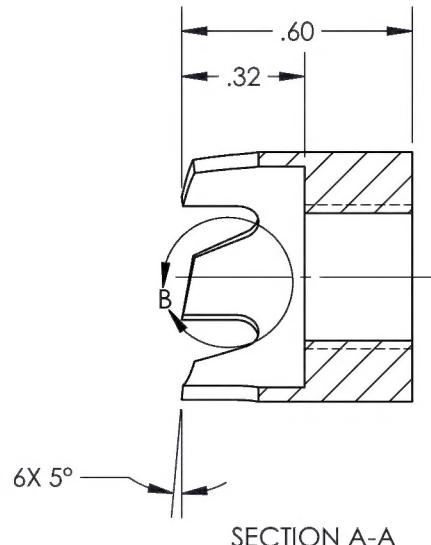
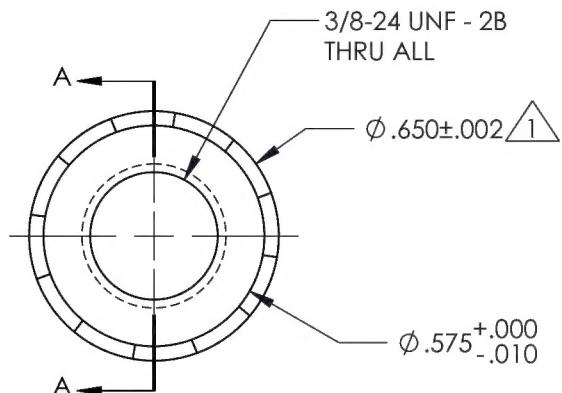
(3)
HANDLE

DART AEROSPACE	
TITLE	
DWG NO. RB877528-4-3	
MAT'L 6061 T6 DRAWN BY: PERRITT	
UNLESS OTHERWISE SPECIFIED APPROVED D Weil	
DIMENSIONS ARE IN INCHES	
.XXX ± .005 FRACTIONS ± 1/8	
.XX ± .01 ANGLES ± 5°	
X ± .1	
1. BREAK ALL SHARP EDGES .015 x 45°	
OR .015R	
2. DIMENSIONAL LIMITS APPLY AFTER	
PLATING	
SPEC MIL-A-8625F, TYPE II, CLASS II	
USED ON MODEL	
MD 500D	
SCALE 1:1	DATE 6/28/2000
SHEET 4 OF 9	

REV
3

This drawing, specifications, and concepts contained here in are the sole property of Dart Aerospace, and may not be reproduced or used in any fashion without the prior written permission of Dart Aerospace Eugene, OR.

REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
1		-7 RADIAL ANGLE INCREASED FROM 2° TO 5° TO IMPROVE OPERATION.	2/19/2004	-	-
2		CH'D NOTE TURN TO FROM .660 P/N -7 PER GABRIEL. CH'D REVISIONS TO NUMERICAL, CH'D TITLEBLOCK & REVISION BLOCK, MADE SECTION VIEW A-A P/N -6, LABELED SECTIONS B-B P/N -17, & SECTION C-C P/N -21.	7/27/2009	RJC	-



6 TOOTH CUTTER

(-7)

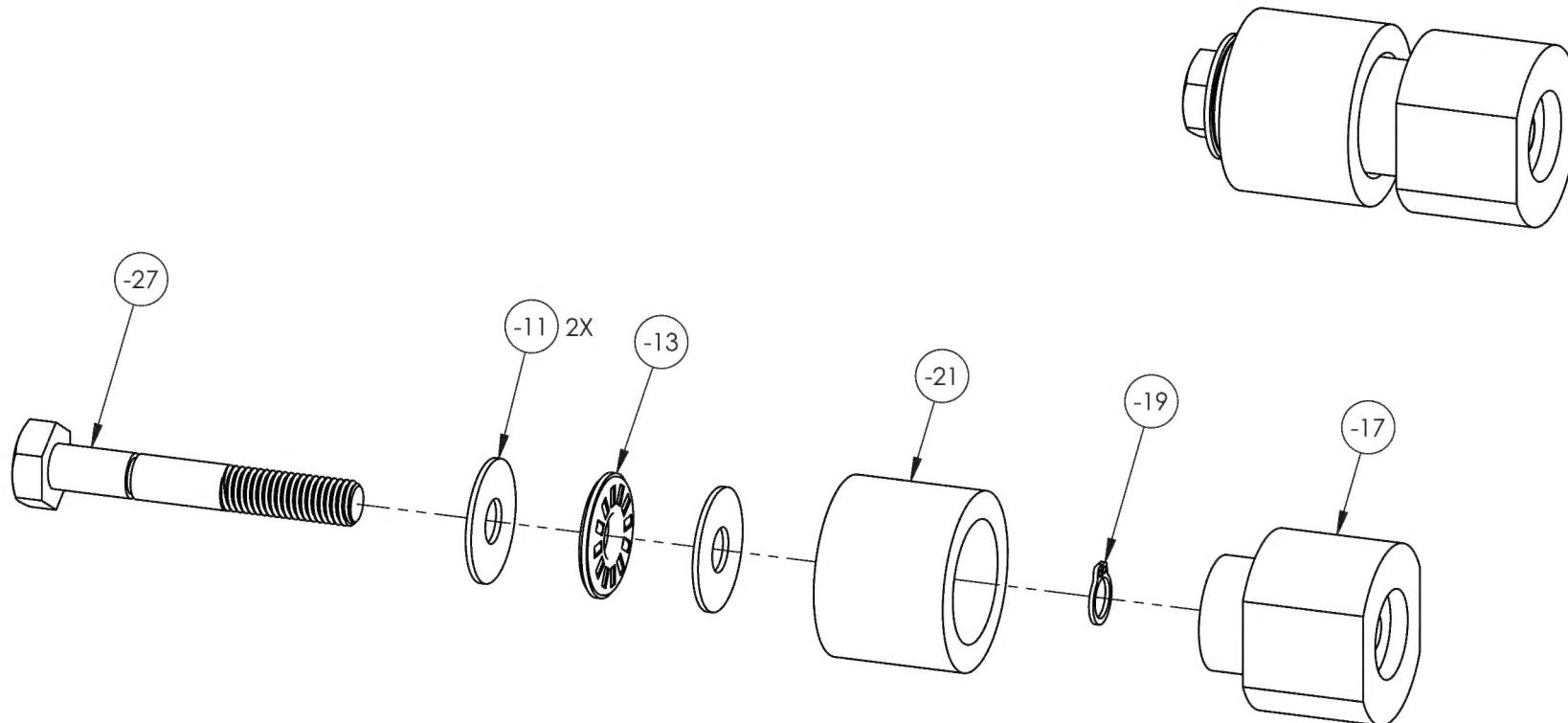
NOTE:

LEAVE OD .010 TO .015 OVER SIZED.
GRIND AFTER HEAT TREAT.

DART AEROSPACE	
TITLE DAMPER BEARING TOOL KIT	
DWG NO.	REV 3
MAT'L 0-1	DRAWN BY: PERRITT <i>D Weil</i>
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	
.XXX ± .005	FRACTIONS ± 1/8
.XX ± .01	ANGLES ± 5°
X ± .1	
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
HEAT TREAT RC 50-60	
FINISH	
SPEC	
USED ON MODEL	
MD 500D	
SCALE 2:1	DATE 6/28/2000
SHEET 5 OF 9	

This drawing, specifications, and concepts contained here in are the sole property of Dart Aerospace, and may not be reproduced or used in any fashion without the prior written permission of Dart Aerospace Eugene, OR.

REV	ECR	REVISIONS	DESCRIPTION	DATE	INITIAL	APPROVED
-----	-----	-----------	-------------	------	---------	----------

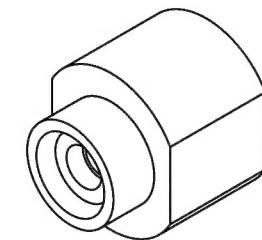
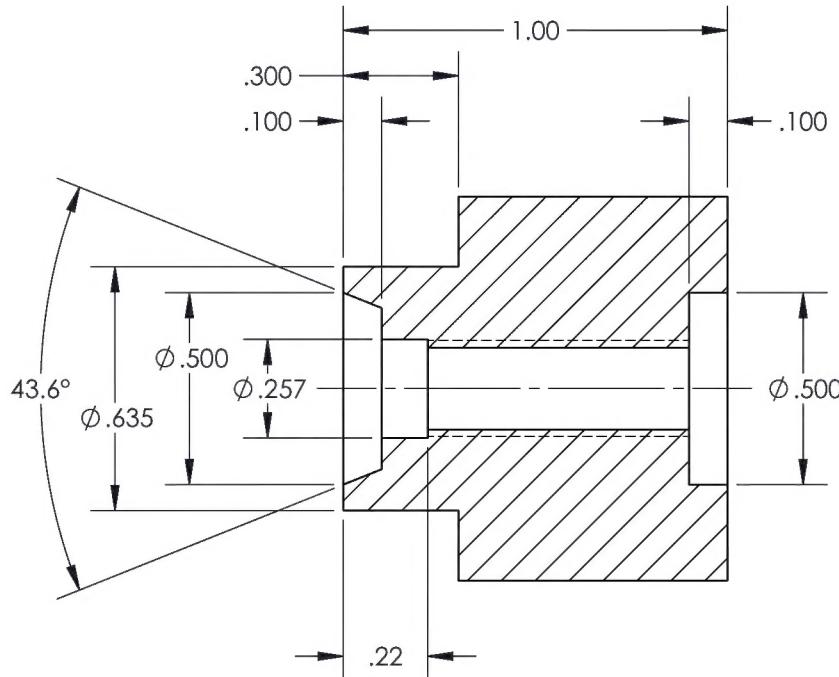
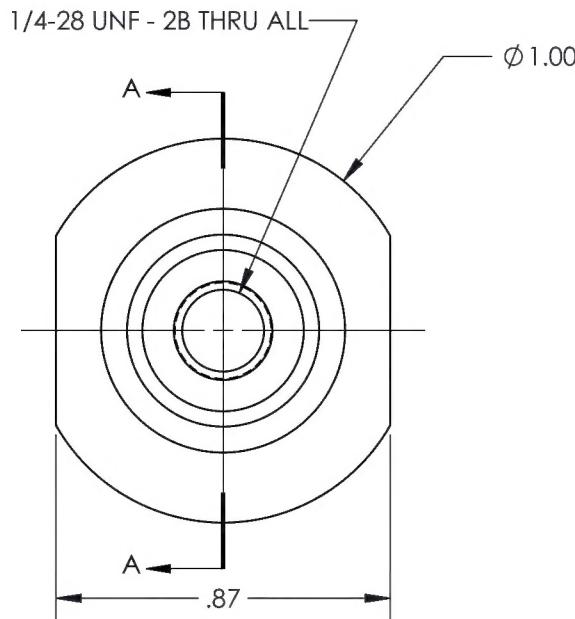


REMOVE & INSTALL TOOL

DART AEROSPACE	
TITLE	
DWG NO. RB877528-4-16	
MAT'L	DRAWN BY: PERRITT
REV 3	
APPROVED D Weil	
UNLESS OTHERWISE SPECIFIED	
DIMENSIONS ARE IN INCHES	
.XXX ± .005 FRACTIONS ± 1/8	
.XX ± .01 ANGLES ± 5°	
.X ± .1	
1. BREAK ALL SHARP EDGES .015 x 45°	
OR .015R	
2. DIMENSIONAL LIMITS APPLY AFTER	
PLATING	
USED ON MODEL	
MD 500D	
SCALE 1:1	DATE 6/28/2000
SHEET 6 OF 9	

This drawing, specifications, and concepts contained here in are the sole property of Dart Aerospace, and may not be reproduced or used in any fashion without the prior written permission of Dart Aerospace Eugene, OR.

REVISONS		
REV	ECR	DESCRIPTION
3	15-0104	-17 DELETED DIMS .493, .420. ADDED DIM 43.6°. CORRECTED TYPO ON THREAD CALLOUT.
		DATE 5/14/2015 INITIAL DPD APPROVED JAG



SECTION A-A

(-17)

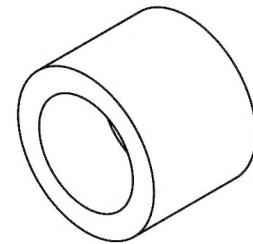
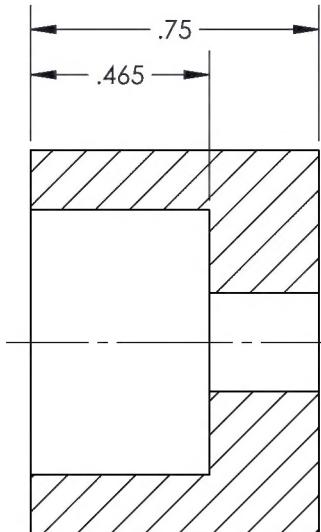
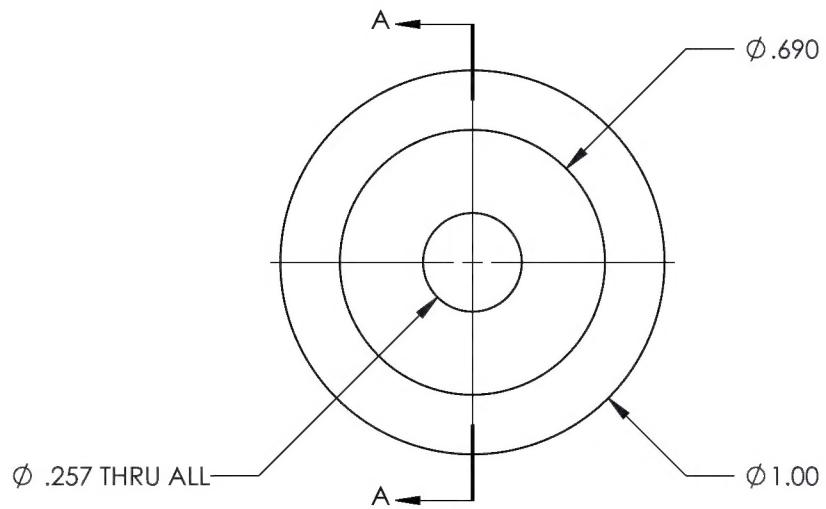
R & I ADAPTER

DART AEROSPACE	
TITLE	
DAMPER BEARING TOOL KIT	
DWG NO.	RB877528-4-17
MAT'L	STRESSPROOF
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	
.XXX ± .005	FRACTIONS ± 1/8
.XX ± .01	ANGLES ± 5°
X ± .1	
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
DRAWN BY:	PERRITT
APPROVED	D Weil
HEAT TREAT	
FINISH	BLACK OXIDE
SPEC	
USED ON MODEL	
MD 500D	
SCALE	2:1
DATE	6/28/2000
SHEET 7 OF 9	

REV
3

This drawing, specifications, and concepts contained here in are the sole property of Dart Aerospace, and may not be reproduced or used in any fashion without the prior written permission of Dart Aerospace Eugene, OR.

REV	ECR	REVISIONS	DESCRIPTION	DATE	INITIAL	APPROVED
-----	-----	-----------	-------------	------	---------	----------



SECTION A-A

(-21)

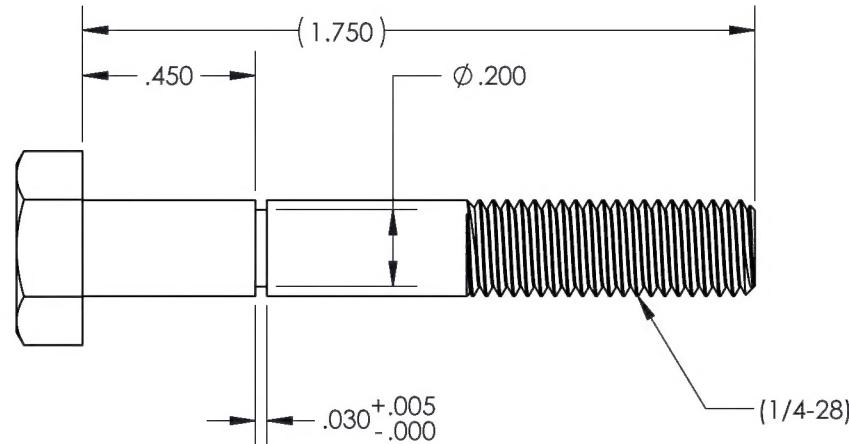
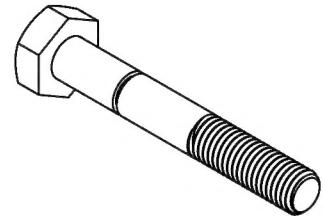
CAP

DART AEROSPACE	
TITLE	
DAMPER BEARING TOOL KIT	
DWG NO.	RB877528-4-21
MAT'L	6061 T6
DRAWN BY:	PERRITT
APPROVED	D Weil
UNLESS OTHERWISE SPECIFIED	
DIMENSIONS ARE IN INCHES	
.XXX ± .005	FRACTIONS ± 1/8
.XX ± .01	ANGLES ± 5°
X ± .1	
1. BREAK ALL SHARP EDGES .015 x 45°	
OR .015R	
2. DIMENSIONAL LIMITS APPLY AFTER	
PLATING	
SPEC	MIL-A-8625F, TYPE II, CLASS II
USED ON MODEL	MD 500D
SCALE	2:1
DATE	6/28/2000
SHEET 8 OF 9	

REV
3

This drawing, specifications, and concepts contained here in are the sole property of Dart Aerospace, and may not be reproduced or used in any fashion without the prior written permission of Dart Aerospace Eugene, OR.

REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
3	15-0104	-27 CH'D DIM WAS .030 IS .030 +.005 -.000.	5/14/2015	DPD	JAG



(-27)

BOLT

DART AEROSPACE			
TITLE			
DAMPER BEARING TOOL KIT			
DWG NO.	RB877528-4-27		
MAT'L	STEEL	DRAWN BY:	PERRITT
		APPROVED	<i>D Weil</i>
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES		FRACTIONS ± 1/8	
.XXX ± .005		ANGLES ± 5°	
.XX ± .01			
X ± .1			
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R		SPEC	
2. DIMENSIONAL LIMITS APPLY AFTER PLATING		USED ON MODEL	MD 500D
SCALE	2:1	DATE	6/28/2000
			SHEET 9 OF 9